Part I

The Origin and Design of Schoolwide RTI

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Defining RTI

Response to intervention (RTI) is best understood as a model used to guide efforts to teach (intervention) based on measures of pupil progress (response) and grounded in the idea of prevention. The phrase, "little kids, little problems; big kids, big problems," captures the idea. Suppose we could collect some relatively simple data on a kindergarten class that could be a powerful predictor of which children would succeed in the third-grade curriculum and which would be likely to fail. What if, based on these data, we could structure specific decisions about our teaching approach directed to the children determined to be at risk for failure that could greatly improve their chances of succeeding in the third grade? Of course, we would need to carefully monitor the progress of these students to ensure we are on the right track and make needed teaching adjustments if indicated. If we do these things, which I show in this book are not particularly burdensome, we will be using schoolwide RTI to raise the power of the teaching-learning process to boost academic achievement and prevent academic failure downstream for all kids.

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Features of RTI

Current definitions of RTI have several features in common as well as several that diverge. The common features, which this book examines in some detail later, are these:

- A three-tier system of matching interventions to assessed student academic and behavioral needs
- Systematic screening of young children using scientifically acceptable measuring instruments
- Interventions that have solid grounding in research and for which there is scientific evidence that they improve behavior or academic achievement, or both
- Progress monitoring of students identified as being at risk for low academic achievement, again using scientific measures
- Decision rules concerning levels of support provided through intervention

Features of RTI that diverge across various published definitions have mainly to do with the uses to which RTI is addressed. We look at standard protocol RTI, problem-solving, RTI, and schoolwide RTI.

Standard Protocol RTI

Many of the systematic investigations of RTI processes that have appeared to date have been focused on disability determination (for a summary of this research, see *Handbook of Positive Behavior Support*, which I edited with Glen Dunlap, George Sugai, and Rob Horner). This standard protocol RTI refers to sets of research-validated decision rules with which to guide specific interventions

at each of three tiers that are formulated through assessment. Tier 1 refers to universal interventions, applicable to all students. Tier 2 refers to *more intensive* interventions targeted to groups of students on the basis of assessed need. Tier 3 refers to *individualized highly intensive* interventions directed to a few students for whom secondary tier interventions are insufficient. Progress monitoring results are then used to determine if a specific learning disability is present that would require a more scientifically valid method of identification than psychological testing, the more prevalent method of disability determination. The breakthrough in standard protocol RTI is in the addition of scientifically valid and reliable measures that are curriculum based rather than referenced against normative distributions that are divorced from the immediate curriculum, such as IQ tests.

RTI and Special Education

Credit for introducing the RTI model into schools goes to special education, which has sought ways to bring greater scientific rigor to the process of determining who should be eligible for supports and services under the Individuals with Disabilities Education Act (IDEA). Readers interested in the origins of RTI in special education and its implications for public policy are directed to a 2006 landmark publication of the National Association of State Directors of Special Education (NASDSE), *Response to Intervention: Policy Considerations and Implementation*. The National Research Center on Learning Disabilities has made available a detailed manual for implementing standard protocol RTI, *Responsiveness to Intervention (RTI): How to Do It* (it can be downloaded from www.nrcld.org).

Problem-Solving RTI

Other viewpoints about uses of RTI extend beyond the standard protocol definition. The second popular conception of RTI that emerged at about the same time (circa 1990) extended the model to children placed at risk for academic failure due primarily to behavior problems (see Bergan & Kratchowill, 1990). Rather than using RTI for disability determination, the model was employed to determine the level of intervention in a behavioral consultation approach with children whose behavior was impeding their response to efforts to teach them. This extension of RTI to determination of the level of intervention to address a social-behavioral problem came to be known as *problem-solving* RTI.

The advent of problem-solving RTI presented an opportunity for two important expansions of the approach beyond the disability determination grounding of standard protocol RTI. First, the application of RTI logic to remediation of behavior problems affecting learning set the stage for a full-blown prevention model, addressed to social and behavioral development, to emerge. Called *positive behavior support*, this evidence-based system of interventions at three tiers enabled the emergence of a broader definition of RTI that integrates both behavioral and academic measurements and interventions.

In the next chapter, I examine the dramatic interplay of forces that came about during the early years of the administration of George W. Bush and the launching of the educational accountability movement that provided the spark that made possible the explosion in RTI research and development. RTI is, after all, not a new idea. Stanley Deno, Doug and Lynn Fuchs, Don Compton, Dan Reschley, and others at Vanderbilt University have been conducting careful scientific studies of RTI processes for over two decades. It took a shift in public policy, the launching of No Child Left Behind (NCLB), with its strong focus on educational accountability, to put RTI into wide spectrum use, beginning with special

education, and in the last few years making the leap into schoolwide applications.

Schoolwide RTI

The first major publication on RTI addressed to the professional community of general education appeared in Rachel Brown-Chidsey and Mark Steege's 2005 book, *Response to Intervention*. They pointed out that not all researchers in special education thought an extension to general education was a good idea. We have all witnessed the meltdown of promising educational practices in the translation from research to practice. Scientific studies involve rigor and careful measurements, but clinical practices often do not follow research-prescribed specifications. When things go badly as a result, one often hears, "We tried such-and-such approach. It didn't work." Just one or two reported failures of application can cause a promising practice to be relegated to the shelf of history while newer practices are put into play. A number of social scientists have pointed out that much more rigorous research is needed before federal and state policy shifts set the stage for RTI to be put into widespread practice.

Schoolwide RTI as an extension of problem-solving RTI is advancing apace with federal and state policy initiatives paving the way. Brown-Chidsey and Steege, to their credit, made a strong case for preserving the processes of careful measurement and decisions, based on reliable data, that are germane to applications of RTI in practice. Since teachers increasingly are bombarded with demands of educational assessments, the rigorous screening and progress monitoring requirements of RTI will likely face a hard sell, at least initially. Brown-Chidsey and Steege addressed this issue:

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> In order for RTI to become a routine part of general education, teachers, administrators, and specialists will need to learn how to implement and interpret RTI methods and data. Some teachers may not have received much, if any, training in data analysis. Others may worry that RTI is another "add-on" to what they are already doing and fear that there are not enough hours in the school day to incorporate RTI practices. Importantly, RTI does not require "adding on" to what is already being done in the classroom. Instead, it involves reviewing current classroom practices to identify those that yield evidence of effective instruction as well as those that do not. RTI methods call for teachers to *replace* those practices that do not yield student improvement with those that do. When using RTI, general education teachers will remain the most important part of students' school success [p. 10].

The advent of problem-solving RTI and, more recently, schoolwide RTI reveals an important conceptual distinction from standard protocol RTI. The latter views RTI as a more scientifically advanced process to identify the presence of a disability, in particular a learning disability (LD). This concept puts emphasis on identifiable limitations that are a characteristic of the individual child (that is, the disability) rather than focusing on environment limitations. Problem-solving RTI shifts that focus to the context in which limitations arise. Behavior problems, for example, may be situational, and the best intervention may prove to be directed more to ecological factors than to the individual. Schoolwide RTI advances this theme by extending RTI processes to all factors that screening assessments may reveal to be impeding the learning process.

The next major publication to appear on schoolwide RTI was John McCook's *The RTI Guide: Developing and Implementing a Model in Your Schools* in 2006. This book offers the advantage of providing

what is essentially a manual on how to do schoolwide RTI with illustrations of specific applications of the approach in Knox County, Tennessee. The manual provides useful examples of scoring forms, sample parent information letters, and other materials. For schools getting started with an RTI conversion, this manual affords a very user-friendly training guide.

Another recent schoolwide RTI book to appear is *RTI: A Practitioner's Guide to Implementing Response to Intervention* (2008) by Daryl Mellard at the University of Kansas and Evelyn Johnson of Boise State University. Although it is not as prescriptive as McCook's manual, it does an excellent job of anchoring schoolwide RTI in educational policy initiatives and statutes and providing a well-integrated summary of critical RTI features.

Evolving Definitions of RTI

Thus far, I have provided a sketch of the origins of RTI and its rapid emergence in American public education. Some view it as a major conceptual breakthrough, while others regard it as a runaway train. From my point of view, both are possibilities. Everything will hinge on the importance of adherence of the process to data. Without careful measurement at each step of the way using scientifically acceptable instruments for screening, progress monitoring, and fidelity of application of interventions guided by decision rules grounded in scientific research, the breakthrough will evaporate. It is all the more likely to evaporate because it is labor intensive and requires extensive professional development in order to be successful.

My own experience with RTI thus far leads me to opt for the viewpoint that it is an immense conceptual breakthrough that can move American education to the next level if it is followed carefully and prescriptively. That is the reason for this book. But it is important first and foremost to understand the logic of RTI and its evolving definitions as we begin to put it to the test in our nation's schools.

Standard Protocol Definitions

RTI originated in special education as an effort to bring child performance data into the eligibility determination process. From there it rapidly moved into broader applications in both general and special education to focus on prevention of potential failure in, first, reading and then, more recently, in math. In the discussion that follows, I examine in detail definitions of RTI that emerged during this transformational period.

The following definition, supplied by Evelyn Johnson, Darryl Mellard, Douglas Fuchs, and Melinda McKnight in their 2006 book, *Responsiveness to Intervention: How to Do It*, applies to standard protocol, where disability determination is the primary target for the implementation of RTI:

> RTI is an assessment and intervention process for systematically monitoring student progress and making decisions about the need for instructional modifications or increasingly intensified services using progress monitoring data. The following is the fundamental question of RTI procedures: Under what conditions will a student successfully demonstrate a response to the curriculum? Thus, interventions are selected and implemented under rigorous conditions to determine what will work for the student [p. i.2].

They continue:

> RTI can be used as a process that is one part of the evaluation for the determination of SLD [a specific learning disability]. A strong RTI process includes the following critical features:
>
> - High-quality, scientifically-based classroom instruction

- Student assessment with classroom focus
- School-wide screening of academics and behavior
- Continuous progress monitoring of students
- Implementation of appropriate research-based interventions
- Progress monitoring during interventions (effectiveness)
- Teaching behavior fidelity measures [p. i.2].

Around the time of reauthorization of the IDEA in 2004, the U.S. Office of Special Education Programs launched a broad national conversation on the general topic of eligibility determination, in this case for LD. Called the LD Initiative, this multiyear effort involving large numbers of stakeholder groups, public testimony in hearings around the country, and symposia on evidence from research culminated with the following 2007 definition by Renee Bradley, Lou Danielson, and Jennifer Doolittle of the Office of Special Education Programs:

> RTI has been conceptualized as a multi-tiered prevention model that has at least three tiers. The first tier, referred to as primary intervention, consists of high-quality, research-based instruction in the general education setting, universal screening to identify at-risk students, and progress monitoring to detect those students who might not be responding to this primary intervention as expected. Within this multi-tiered framework, decisions regarding movement from one level to the next are based on the quality of student responses to research-based interventions. Subsequent levels differ in intensity (i.e., duration, frequency, and time) of the research-based interventions being delivered, the size of the student groupings, and the skill level of the service provider [p. 9].

Daryl Mellard and Evelyn Johnson in their 2008 book have provided a concise and readable extension of the standard protocol conception of RTI for school practitioners. In clarifying their understanding of the utility of RTI, they wrote:

> RTI can serve three distinct applications: screening and prevention, early intervention, and disability determination. Within this text, we emphasize RTI in a general education setting for prevention and early intervention of students' learning difficulties. Strong evidence supports the RTI components and principles to improve instruction and related student outcomes. The research does not, to date, support the use of RTI as an exclusive component to disability determination. However, the research foundation may be used in incorporating RTI as *one* component of disability determination. As such, RTI provides documentation that the student has received appropriate and high-quality instruction in the general classroom, but more thorough assessment is required to determine the nature and extent of the student's disability if a special education referral is made [p. ix].

Combined Standard Protocol and Problem-Solving Definitions

Combining standard protocol and problem-solving definitions, NASDSE published a remarkable document in 2006, *Response to Intervention: Policy Considerations and Implementation*, that signaled a major shift in the traditional special education policy arena. Prior to 2006, the field of special education had seemed content with pursuit of an expansion agenda. Characterized by the rapid creation of new disability categories (among them, autism spectrum disorder and attention deficit hyperactivity disorder), the field was becoming a growth industry, with increasing numbers of scientific journals,

new organizations, and ever increasing federal and state budgets. The 2006 publication made clear that the state director's group now views RTI as a potential pathway to the reduction of numbers of students identified for special education and as a potential bridge between NCLB and IDEA. At a time when some in the field of special education, on the basis of scientific conservatism, were for confining RTI to a status of providing one source for disability determination, the state directors were creating a window of opportunity for integrating special and general education policy with RTI as a principal driver in the process. The NASDSE definition of RTI thus reflects a blend of standard protocol and problem-solving RTI conceptions. More important, it advanced the problem-solving RTI case by fully integrating social and behavioral interventions with academic interventions under a single RTI logic model. Here is the NASDSE (2006) definition of RTI:

> Response to Intervention (RTI) is the practice of providing high-quality instruction and interventions matched to student need, monitoring progress frequently to make decisions about changes in instruction or goals and applying child response data to important educational decisions. RTI should be applied to decisions in general, remedial and special education, creating a well-integrated system of instruction/intervention guided by child outcome data. Child outcome data are essential to:
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> - Making accurate decisions about the effectiveness of general and remedial education instruction/interventions;
> - Making early identification/intervention with academic and behavioral problems;
> - Preventing unnecessary and excessive identification of students with disabilities;

- Deciding eligibility for special programs, including special education; and
- Determining individual education programs as well as delivering and evaluating special education services [p. 1].

The theme of combining standard protocol and problem-solving RTI approaches for school applications was discussed in John McCook's implementation manual for practitioners. He suggests defining a set group of interventions to be used throughout the system. Which interventions are to be used with individuals or groups of students are then decided by problem-solving teams. Specific interventions are chosen from lists of scientifically based research methodologies that were identified to address particular areas of concern.

Schoolwide Definitions

In my view, RTI is a carefully researched system of specific applications that is evolving as a model as the system interacts with public policy at federal and state levels. It began as standard protocol RTI, an improvement in the overall process of determining the presence of a specific learning disability, with part of the initial research directed to problems in reading. The national organization of special education state leaders set the stage for moving into schoolwide applications of the RTI logic system by incorporating applications of the system to social and behavioral problems impeding learning, which had been a principal feature of problem-solving RTI.

The next stage of RTI evolution appears to be delineation of a fully integrated behavior and academic risk prevention system with three tiers, characterized by decision rules for matching interventions to measured student need, with fidelity of application at each level of engagement. Such an integrated RTI model offers the distinct advantage of bringing general and special educators together

to pursue a common agenda of matching resources and professional expertise to identified student need on the basis of scientific data. There is a cautionary note, however. Although careful research has identified some useful measurement tools and applications of RTI have led to some useful decision rules for matching interventions to student needs, applications of schoolwide RTI go far beyond the available necessary tools to maintain the evidence-based feature of standard protocol RTI. That said, there is no stopping a rapidly accelerating train. Maintaining the rigorous scientific basis for RTI logic, its hallmark, will require a substantial investment of federal, state, and philanthropic resources directed to research and professional development in guiding the emergence of schoolwide RTI.

Maintaining the rigorous scientific basis for RTI logic, its hallmark, will require a substantial investment of federal, state, and philanthropic resources directed to research and professional development in guiding the emergence of schoolwide RTI.

The best, and certainly the most concise, definition of schoolwide RTI that I found is that provided by Brown-Chidsey and Steege: "Response to Intervention (RTI) is a systematic and data-based method for identifying, defining, and resolving students' academic and/or behavioral difficulties" (p. 144). Brown-Chidsey and Steege elaborated:

> RTI methods focus on a new problem definition in which the problem is measured by the distance between what is expected and what is occurring. Instead of the student being the problem, the problem is a phenomenon resulting from student-environment interactions. Traditional approaches to dealing with students who struggle in school have included reducing what is expected of them with curriculum modifications. RTI methods call

> for a different problem-solving approach in which each student's response to specific teaching procedures is tracked with *data* and reviewed *systematically* to determine whether other instruction is needed. Certainly there are educators already using some, or all, components of the RTI method. However, in order for RTI to be maximally effective for all students, all educators must understand and employ consistent procedures [p. 139].

Brown-Chidsey and Steege's comments, written primarily for general educators, provide a close fit with the RTI model that my colleagues and I have been investigating using a comprehensive school reform approach as the driver. Called the Schoolwide Applications Model (SAM), the approach offers the advantage of providing a reliable and valid fidelity estimation tool, the SAM Analysis System, that permits the careful evaluation of the extent to which each of fifteen critical features of the model are being implemented at each stage of enculturation of the systems change approach. This process enables an evaluation of the effects of specific schoolwide interventions such as schoolwide positive behavior support on student social or academic achievement as measured by scientifically validated instruments. As new models of schoolwide RTI emerge, it will be of paramount importance to have validated fidelity estimation tools. Validated here means measurement tools that have been subjected to rigorous psychometric evaluation and have been shown to have predictive validity with regard to student achievement. Without these, our ability to replicate highly successful models will be impaired.

Comprehensive Schoolwide RTI

I elaborate more on how schoolwide RTI operates within the SAM school reform model in later chapters, including some examples from a participating school district. Figure 1.1 illustrates the RTI

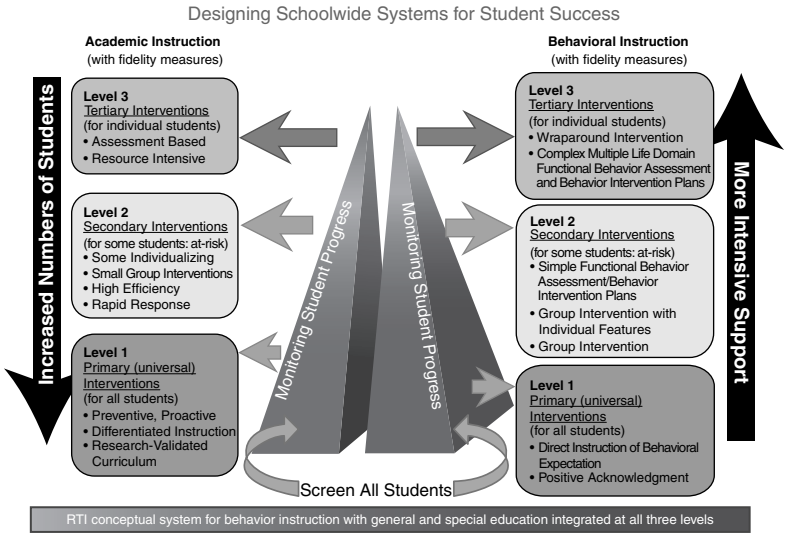

Figure 1.1 RTI Conceptual System with General and Special Education Integrated at All Three Levels

model that characterizes SAM and other schoolwide RTI applications. (It should be noted that similar figures appear in McCook's 2006 book and NASDSE's 2005 book.)

The figure casts the RTI model as a pyramid. Horizontal lines bisecting the pyramid illustrate the three levels reflecting the intensity of interventions. Conceiving of RTI as a three-tiered system is really just a matter of convention. The original public health prevention model from which RTI emerged in education was cast as having primary, secondary, and tertiary tiers, and that tradition has carried forward. In practice, there will quite likely be tiers within tiers, and future RTI models will likely reflect multitiered systems of support rather than the three-tiered model. Schools implementing SAM, for example, use color codes to reflect levels of support. Although Figure 1.1 does not appear in color here, in use the darker blue toward the base reflects universal applications, and shifts toward yellow and orange toward the middle reflect greater intensity of supports. Red toward the top of the pyramid signals individualized levels of support, while dark red at the tip can reflect

wraparound, such as the comprehensive approach developed by Lucille Eber and her colleagues in Illinois (see www.pbisillinois.org). Wraparound, the most intensive level of individualized support, can involve school, community, and family participation in a complex educational and treatment plan. With repeated measures over time, the SAM RTI pyramid can reflect changes in levels of intensity at district, school, grade, and classroom levels; specified groupings of students (for example, English Language Learners and special education students); and individual students. The goal at all levels is to increase the percentage of the pyramid that is shifted downward toward the blue end.

Color shifts on the pyramid can vary on the left and right halves, showing academic levels of intervention and social and behavioral interventions on the right. For example, a student may be in grade-level universal instruction for academics, but be monitored for progress in social or behavioral risk factors on the basis of office disciplinary referrals, and be in a "check in/check out" schoolwide positive behavior support secondary-level intervention. Check in/check out here refers to a supervised self-monitoring procedure that has demonstrated success in helping students to learn pro social behavior. The pyramid software would show this student solidly in the blue area on the left side of the pyramid but in a corresponding pale yellow color designator on the right side (social and behavioral side).

The reason for using the color designation in SAM is to encourage teachers and administrators to think of levels of intervention and support as a continuum rather than as discrete categories. We have already encountered some school districts that purport to have an RTI model in place but conceive of secondary-level interventions as a "resource room" where "the secondary kids" spend their day and tertiary-level interventions as being where special education enters the picture. In these cases, the "tertiary kids" are usually in special education classrooms.

The strength and great advantage of schoolwide RTI is its capacity to integrate school resources (such as general and special education functions and supports) and its dynamic quality of applying greater levels of intensity where indicated, and scaling back extraordinary interventions where indicated, by data from progress monitoring. As I elaborate in Chapter Two, schoolwide RTI affords the opportunity for educators to reframe problems of the teaching-learning process more from the perspective of social sciences and away from the more categorical medical (i.e., diagnostic/prescriptive and focused on problems located in the individual) model that exists in most schools today.

The strength and great advantage of school-wide RTI is its capacity to integrate school resources (i.e., general and special education functions and supports), and its dynamic quality of applying greater levels of intensity where indicated, and scaling back extraordinary interventions where indicated, by data from progress monitoring.

The arrows at the left and right sides of the figure indicate the direction within the model of more intensive supports and services moving up from the base (right arrow) and the direction of increasing numbers of students requiring fewer intensive supports and services toward the base (left arrow). Some RTI pyramid schematics include percentages of students at each of the three levels, usually depicted as 80 to 85 percent in level 1, 10 to 15 percent in level 2, and 1 to 5 percent in level 3. My colleagues and I feel that on the basis of our data from urban core schools, these figures can be misleading. We have worked with schools, for example, where fewer than 40 percent of the students were functioning under universal levels of support and where as many as 30 percent required individual levels of support for behavior or academics, or both.

Figure 1.1 provides a few examples of instructional interventions for both behavior and academics at each of the three traditional levels of RTI. For example, level 1, universal instruction in social/behavioral development, includes teaching school expectations of personal deportment and providing a measurable system for acknowledging students who reflect learning of and performance on school expectations ("catch 'em being good"). On the academic side, level 1 (or universal) educational interventions include differentiated instruction matched to student learning characteristics and teaching within a research-validated curriculum, particularly in the areas of reading, writing, and math subject areas.

Figure 1.1 indicates the need of careful screening to identify students at younger grade levels or early in the school year who may be at risk for learning impairments due to processing problems (academics), social or behavioral problems, or combinations of the two. Furthermore, the pyramid reflects the requirement to monitor the progress of students (at all positions) who have been identified as being at risk for failure to progress at grade-level expectations on the basis of cognition, behavior, and the presence of a disability.

Finally, the caption reflects the intent of this schoolwide RTI approach to fully integrate educational resources, technology, services, and supports.

To Sum Up

RTI is a contemporary manifestation of an earlier public health prevention model. In education, its debut was manifest in extensive research into why students fail to learn to read; whether those who so fail should be classed automatically as LD; and whether data on how students respond to intervention strategies at different levels of intensity should be added to psychological test data as a basis for diagnosing LD and determining eligibility for services under IDEA. This conception of RTI is called *standard protocol RTI*.

A parallel form of RTI with applications in education and school psychology is directed to determining levels of intervention required to ameliorate academic or behavior problems. This form of the RTI model, which relies on team processes within schools for screening progress monitoring and level and type of intervention, is not particularly concerned with eligibility determination for special education; rather, it is directed more to matching school resources with identified student need on the basis of ongoing assessments. This form of RTI is called *problem-solving RTI*.

The national organization for state directors of special education, NASDSE, put forward a set of policy recommendations in 2006 that advanced an agenda of combined standard protocol and problem-solving RTI that has set the stage for *schoolwide RTI*, which is now emerging as a major conceptual advance in both the general education and special education professional and research communities. Advances in schoolwide RTI have now set the stage for the emergence of a comprehensive model of RTI grounded in school reform, the shape of which is the substance of the rest of this book.

All forms of RTI are characterized by three levels (sometimes called tiers) of educational support, or interventions: primary (universal), secondary (targeted group), and tertiary (individual). The process begins with early screening for academic or behavioral risk factors that may impede learning due to the presence of disability or other factors. Students determined to be at risk undergo monitoring to determine if increased levels of support are merited, if the student is responding to interventions, and if more intensive levels of support can be withdrawn. Data from both screening and progress monitoring assessments must emerge from the use of measurement tools with strong psychometric properties.